

REMARKS

Claims 4, 6-8, 10-12 and 14-19 are pending and stand ready for further action on the merits. Support for the amendment to claim 10 can be found in cancelled claim 13. Claim 11 has been amended to be in independent form. New claim 19 finds support in the specification at page 16, line 8 from the bottom. No new matter has been added by way of the above-amendment.

The following sections correspond to the sections of the outstanding Office Action.

Section 2

Claims 4 and 8 are rejected under 35 U.S.C. §102(b) as being anticipated by BE 892401 (BE '401) or JP 50129361 (JP '361). Applicants respectfully traverse the rejection.

The present invention described in independent claim 8 is a method of using a plant-activating agent or composition for activating plants by applying the agent or composition to a plant. The advantage of the inventive agent is that it works to promote the growth of the plant by itself and not *solely* to increase the efficiency at which other components of the composition are absorbed in the plant. The agent of formula (II) is effective when applied to either the root or leaves.

As such, the inventive plant-activating agent/composition is distinct from the prior art compositions which are applied to

plants in that the inventive agent/composition: a) promotes the green-degree of the leaves of the plant; b) heightens the efficiency for absorbing the fertilizer; c) increases the leaf-area; and d) increases the root power while not causing chemical injury to the plant.

In the inventive method, the plant is activated with the plant activating agent of formula (II) which includes stearic acid within its scope (but is not limited thereto). The present inventors have surprisingly found that the agents of formula (II) activate plants by promoting permeation. This is evidenced by their affect on cells such as chlorella as shown in Table A1.

Table A1 is herein reproduced for the Examiner's convenience.

Table A1

	Plant-activating agent or plant-activating composition		Evaluation result	
	Kind		Concentration (ppm)	Reproductive ability
Inventive product	A1-1	Myristic acid (LUNAC MY-98)	30	127
	A1-2	Myristic acid (LUNAC MY-98)	15	146
		Palmitic acid (LUNAC P-95)	15	
	A1-3	Stearic acid (LUNAC S-98)	30	154
	A1-4	Stearic acid (LUNAC S-98)	30	158
		EDTA 4Na	4	
	A1-5	Oleic acid	30	148
Comparative product	A1-6	Behenic acid (LUNAC BA)	30	150
	A1-7	Melissic acid	30	138
	A1-1	Acetic acid	30	90
	A1-2	Acetic acid	30	92
		Ascorbic acid Na salt	4	
	A1-3	Propionic acid	30	94
	A1-4	Lactic acid	30	93
	A1-5	Inorganic salt medium (non-treated area)	-	100

The above-data was obtained upon testing the ability of certain acids (or salts thereof) to activate the reproductive ability of chlorella cells.

In the experiment, chlorella cells were placed in a culture containing an inorganic salt medium. The values in the above-table were obtained by comparing the concentration of the cells in areas of the culture which were treated with the acids (or salts thereof)

to the concentration of the cells in non-treated areas. The effective concentration of the cells in the non-treated areas was fixed at 100 for purposes of this comparison. As can be seen from the above-data, the present inventors have surprisingly found that compounds of formula (II) are far superior for promoting cell reproduction than acids (or salts thereof) which are not encompassed by formula (II). In fact, stearic acid was shown to activate the plant even at a concentration of 30 ppm. Thus, significant unexpected advantages are found using the present method.

This is in contrast to the teachings of JP '361. In JP '361, stearic acid is used to control the release of a fertilizer. There is no teaching or suggestion by JP '361 that the stearic acid is absorbed by the plant or that the stearic acid has any affect thereon.

With regard to BE '401, this reference teaches the application of a composition containing stearic acid to leaves to supply the leaves with a wax layer on the natural wax layer which is inherently present on the leaves, and the composition is taught to give protection against frost. The stearic acid is merely taught to be part of a mixture of "solid substances" used in the emulsion which is applied to the leaves. There is no teaching or suggestion by BE '401 that the stearic acid has any effect on the plants themselves. Also, BE '401 fails to teach

or suggest that the stearic acid has an advantageous effect as was found by the present inventors.

In describing the requirements for rejection of a claim by anticipation, the Manual of Patent Examining Procedure (Section 2131) states:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference (ref. omitted). The identical invention must be shown in as complete detail as is contained in the... claim (ref. omitted)."

Furthermore, in *Ex Parte Levy*, 17 USPQ2d 1461 (BOPAI, 1990), the Board of Patent Appeals and Interferences has written:

"Moreover, it is incumbent upon the Examiner to identify wherein each and every facet of the claimed invention is disclosed in the applied reference (ref. omitted)."

Accordingly, Applicants respectfully indicate, every element in a claim must be found in the reference in order that the reference anticipates the claim.

Neither JP '361 nor BE '401 teach or fairly suggest that the stearic acid can be applied to either the root or the leaves, nor do these references teach the improvement to the permeation of the plant as shown in the experiments of Table A1 above. Therefore, the references do not anticipate the claims, and as such, Applicants respectfully request that the rejection be withdrawn.

Section 3

Claims 10, 16 and 18 are rejected under 35 U.S.C. §102(b) as being anticipated by JP '361.

Applicants respectfully submit that JP '361 fails to teach or suggest the invention of claim 10. However, in order to advance prosecution, Applicants have amended claim 10 to recite the subject matter of claim 13, a claim not currently under rejection, thereby rendering the rejection moot.

Claim Objections/Allowable Subject Matter

Applicants note with appreciation that the Examiner indicated that claims 6, 7, 12 and 14 are allowable.

The Examiner indicated that claims 11, 13, 15 and 17 are objected to for being dependent upon a rejected base claim. Applicants note that this is true with respect to claims 11 and 13, however, this is not true with respect to claims 15 and 17. Both claims 15 and 17 depend from claim 6, which the Examiner indicated as being allowable. The Examiner is respectfully requested to clarify the standing of claims 15 and 17 in the next communication.

Conclusion

In view of the above amendments and comments, Applicants respectfully submit that the claims are in condition for allowance. A notice to such effect is earnestly solicited.

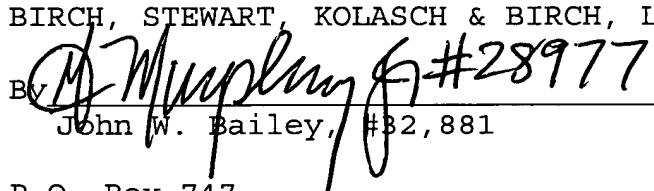
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Garth M. Dahlen, Ph.D. (Reg. No. 43,575) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.


Respectfully submitted,

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0425-0836P